

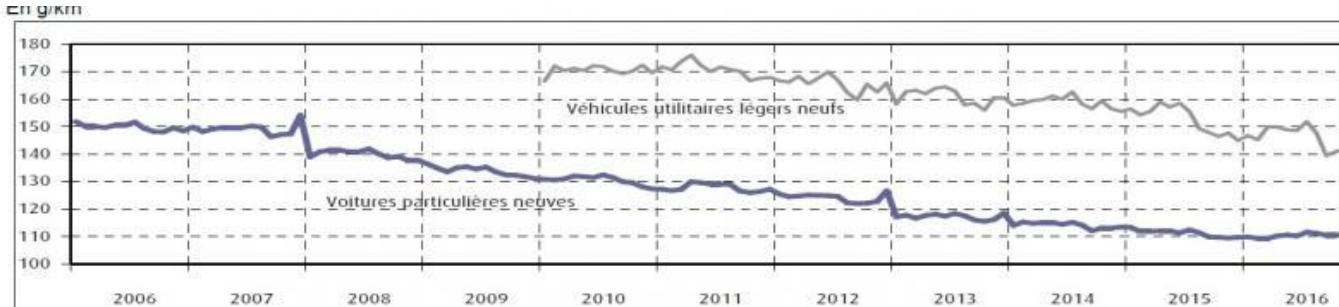
Pauline GIROT DE LANGLADE, Counselor for Industry and Services

Séminaire Plan Climat, le 20 novembre 2017

Introduction : Overview of low-carbon vehicles in France

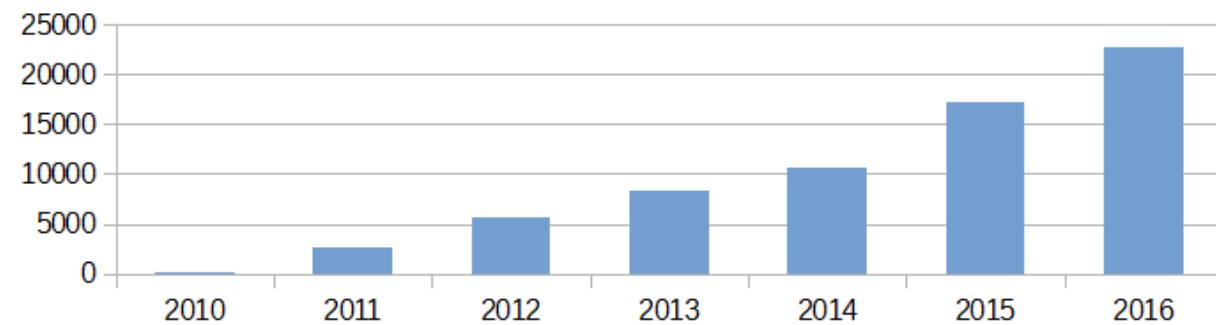
Average emission of CO₂ for passenger car in 2016 : **110 g CO₂/km**
in EU : 122 g CO₂/km

Evolution of CO₂ Emissions for new passengers cars and light commercial vehicles since 2006



Source : SOeS, RSVERO

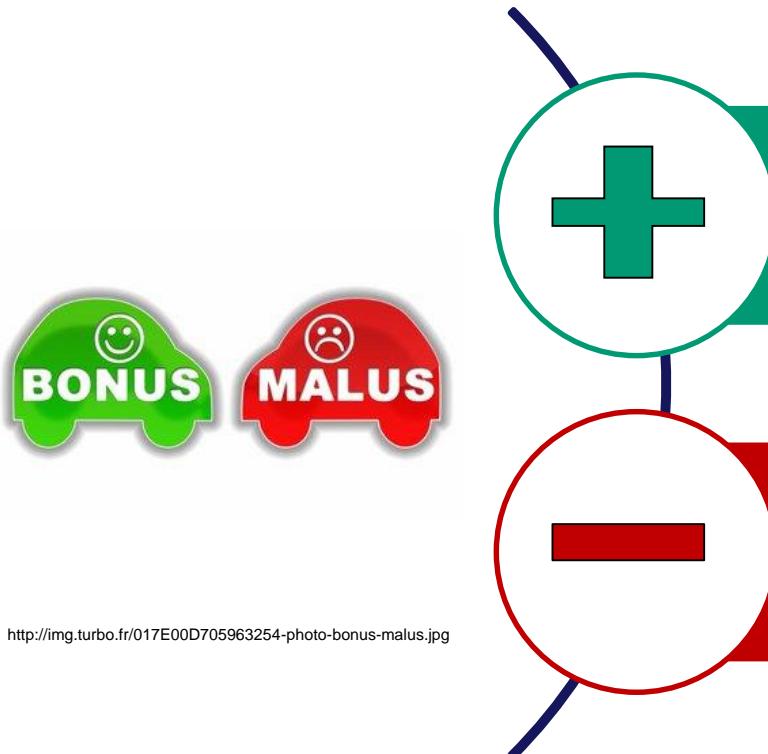
Evolution of number of registration for electric passenger cars in France



Source : <https://www.ecologique-solidaire.gouv.fr/developpement-des-vehicules-propres#e3>

I. Tax Incentives : few examples

Bonus-Malus System



Bonus if you buy or rent a low-carbon vehicle : financial support, from 1000€ to 6000€ for the purchase of 100% electric vehicle

Malus if you buy or rent a polluting vehicle ; from 50€ (127g CO₂/km) to 10 000€ (above 190g CO₂/km)

<http://img.turbo.fr/017E00D705963254-photo-bonus-malus.jpg>

I. Tax Incentives : few examples



<http://s1.edi-static.fr/Images/Archives/CE/CE67/Para225091.jpg>



Tax on companies' vehicles (Taxe sur les véhicules de sociétés – TVS)

<http://img.actionco.fr/Images/Breves/Thumbbreve41571-0.jpg>



Depreciation cap for automobiles

<https://www.journalofaccountancy.com/content/dam/jofa/issues/2016/sep/special-depreciation.jpg>



Changeover Bonus (Prime à la conversion) : 500€ to 4000€ of bonus for purchasing a new low-carbon vehicle and the disposal of a diesel vehicle matriculated before 2006

https://www.actu-environnement.com/images/illustrations/news/22841_une.jpg

II. Air Quality Certificate Crit'Air



<https://www.certificat-air.gouv.fr/en/>

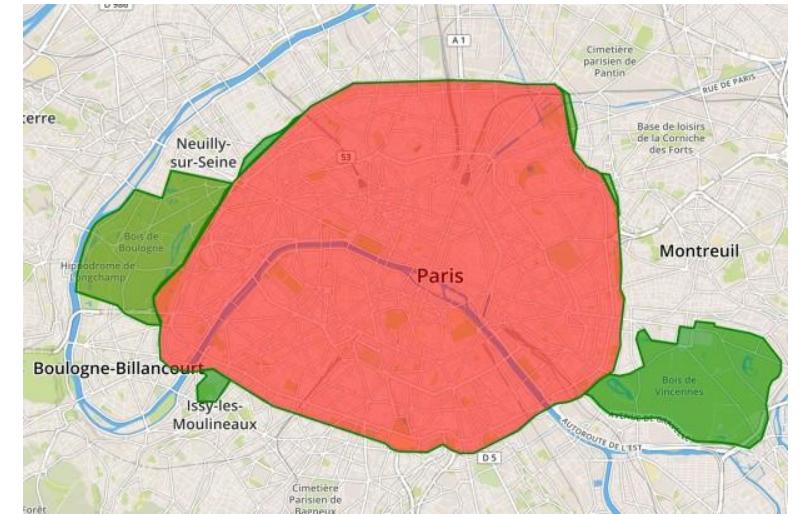
8 478 518 certifications granted (2017/11/06)

Each certificate corresponds to a vehicle class defined according to air pollutant emissions.

the Air Quality Certificate is mandatory for:

- Driving and parking in **restricted traffic zones (french low emission zones)** designated by the authorities, such as inside the Paris ring road
- Driving in case of access regulation if an **emergency scheme** have been implemented by prefects during pollution episodes. This may be the case in the Grenoble Metropolitan Area, in Lyon-Villeurbanne and in the Greater Paris Region inside the motorway A86

Paris restricted traffic zones



<http://www.largus.fr/actualite-automobile/carte-de-la-zone-de-circulation-resteinte-zcr-a-paris-en-2017-8324385.html>

III. Development of charging infrastructures



Electric charging infrastructure

Today : 15 883 charging point open to public

Goal : 7 M of charging point by 2030

And a lot of projects including the Corri-Door by SODETREL, aiming to build 200 rapid charging point on highways



Hydrogen

Plan for the New Industrial France's objective : 100 stations in 2020 for 1000 vehicles

Consortium H2 Mobilité France objective : 600 stations by 2030 for 800 000 vehicles



Gas

Directive 2014/94 aims to develop more natural gas stations

Joint call for projects PIA/Ademe in 2016

Tax Incentives

IV. Energy Transition Law and objectives for 2030

Renewing the vehicle fleet for the **public sector**

- obligation for several public actors to acquire or use low-carbon vehicles
- possibility for police agent in charge road traffic/parking to offer some advantages to low-carbon vehicles

Strategy on development of clean mobility

- published in December 2016
- overview of clean mobility in France, of the measures already taken, and of the objectives and future possible measures for the development of more clean mobility

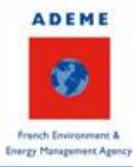
Main objectives (by 2030)

Average consumption of new vehicles
=
2L/100km

Plug-in hybrid vehicles fleet
=
2,5 M vehicles

Electric vehicles fleet
=
1,9 M vehicles

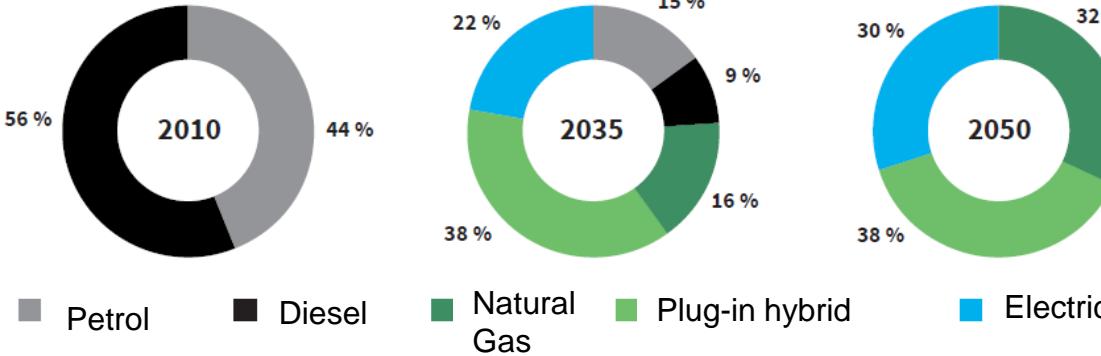
V. End sales of gasoline and diesel vehicles



ADEME's energy transition scenario for 2030-2050

Download the scenario's summary in English on Ademe website :
<http://www.ademe.fr/sites/default/files/assets/documents/ademe-energy-transition-scenarios-2030-2050-english-french-7942.pdf>

New vehicles' sales



Sales (%)	2010	2035	2050
Gasoline*	44 %	15 %	0 %
Diesel	56 %	9 %	0 %
Natural Gas	0 %	16 %	32 %
Plug-in Hybrid	0 %	38 %	38 %**
Electric	0 %	22 %	30 %
Average CO2 emissions for new vehicles (gCO2/km)	130	66	49

* Including biofuel liquid or gas

** Between 2035 and 2050, sales of Plug-In hybrid vehicles will continue to grow, but slower than sales of Natural gas or Electric vehicles. Furthermore, the part of plug-in hybrid running on gasoline or diesel will strongly decrease, in favor of gas

The ADEME (Agence de l'environnement et de la maîtrise de l'énergie) published its new Energy-Climat scenario, confirming the possibility to reduce drastically the greenhouse gas emissions by 2050. Regarding the automobile sector, ADEME recommends to strengthen the existing measures and encourages investment aiming to develop electric or natural gas vehicle development. ADEME also considers that, in the long term, we will have to face a big change in mobility habits

European Union's involvement



On 8 November 2017, the European Commission presented a legislative proposal setting new CO2 emission standards for passenger cars and light commercial vehicles (vans) in the European Union for the period after 2020.

https://ec.europa.eu/clima/policies/transport/vehicles/proposal_en

Conclusion : Rethink mobility



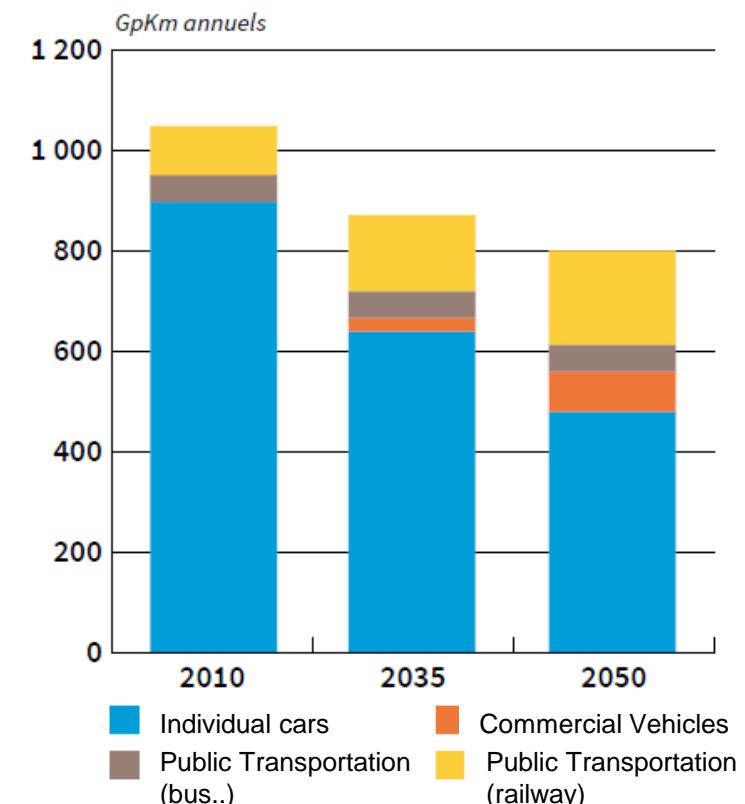
**French Prime Minister, Mr Edouard Philippe,
during the Assises Nationales de la Mobilité
19th September 2017**

September-December 2017 :
3 months of consultations, bringing together all the stakeholders with the objective to work on a new framework law on mobility for the 1st semester 2018

ADEME's energy transition scenario for 2030-2050

Mobility on road and railway (giga-passenger-km in one year)

Gpkm / %	2010	2035	2050		
Individual cars	890	85 %	636	74 %	472
Commercial Vehicles	0	0 %	26	3 %	82
Public Transportation (bus..)	52	5 %	52	6 %	51
Public Transportation (railway)	99	10 %	150	17 %	187
Total	1 041		864		792



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